

REMARKS

A. Status of the Claims

Claims 1-12 were examined. Claims 1, 3, 5, 8, 9, and 11 have been amended. Claims 1-12 are, therefore, pending.

B. The Proposed Drawing Amendment Has Support and Should Be Entered

The Office disapproved the proposed correction to FIG. 1. The Office admits that the top half of FIG. 1 “illustrates something that is not shown in the bottom half of the figure[,]” but denies that the specification contains support that the “something” is a snap ring positioned in a groove. Applicant disagrees.

The specification must be interpreted by one of ordinary skill in the art. A declaration by the inventor is filed with this paper to show how one of ordinary skill in the art would interpret FIG. 1. In the inventor’s opinion, anyone who is informed in the design and use of wing unions of the type depicted by FIG. 1 would understand that the prior art represented in FIG. 1 includes a snap ring positioned in a groove in the retainer segments 28. *See* Declaration of Paul Crawford Under 37 C.F.R. § 1.132 (“Crawford Decl.”) at ¶¶ 1-9. In view of this information and for the reasons specified in the first response, the Office is respectfully requested to enter the proposed correction to FIG. 1.

C. Claims 1-12 Are Patentable Over the Cited References

The Office maintains its rejection of claims 1-12 as being obvious over Applicant’s prior art figures 1 and 2 in view of the drawing labeled “CROSSOVER ASSY” from reference C2 and U.S. Pat. No. 5,350,205 to Aldridge et al. (“Aldridge”). Applicant respectfully traverses.

1. Claims 1-8

Independent claims 1 and 5 are both directed to a pup joint. The pup joint includes a length of pipe and a male sub connected to the distal end of the length of pipe. The pup joint also includes “a retention shoulder extending radially outwardly, **and that is not removable**, from the male sub . . .” (Emphasis added). The bolded portion has been added to each of these claims in order to further distinguish the snap ring of Aldridge.

The snap ring of Aldridge does not meet the retention shoulder limitation of claims 1 and 5 because the snap ring is **removable**. It can be easily removed from its groove to defeat the nut retention functionality specified in Aldridge. The snap ring also can inadvertently come out of its groove due to handling, corrosion, or other mishaps in field operations, thus eliminating its nut retention functionality.

The rejection of claims 1-8 should be removed because Aldridge does not teach or suggest the claimed non-removable retention shoulder. The Office is requested to allow these claims.

2. Claims 9-12

Independent claim 9 is directed to a pup joint. The pup joint includes a length of pipe and a male sub connected to the distal end of the length of pipe. The male sub includes “a section having **an outside diameter greater than the outside diameter of the length of pipe . . .**” (Emphasis added). The pup joint also includes “a retention shoulder extending radially outwardly, **and that is not removable**, from **the section of the male sub . . .**” (Emphasis added). The non-removable language has been added to claim 9 to further distinguish the snap ring of Aldridge. None of the cited references teaches or suggests a retention shoulder that

extends radially outwardly, and that is not removable, from a section of a male sub that has a larger outer diameter than the outer diameter of the length of pipe.

While admitted prior art FIGS. 1 and 2 both show males subs having sections with greater outer diameters than the outer diameters of the respective lengths of pipe, there is no non-removable retention shoulder extending from either such section. Aldridge illustrates a snap ring 74, but that snap ring is positioned on the pipe section of flanged nipple 14. Snap ring 74 **does not** extend radially outwardly from a male sub that is connected to that pipe section, much less from a section of a male sub with a greater diameter than that pipe section. Snap ring 74 also is removable, as explained above, and does not suggest the claimed non-removable retention shoulder.

The Office is requested to remove the rejection of claims 9-12 and allow those claims to issue.

3. Claims 3, 8, and 11

Claims 3, 8, and 11 have been amended to state that the length of pipe, the male sub, the female sub, **and the retention shoulder** are constructed of a **single forging**. Aldridge does not teach or suggest the use of retention shoulder that is part of a single forging that includes the male sub, the female sub, and the length of pipe. The snap ring of Aldridge is a separate piece from flanged nipple 14.

For these additional reasons, claims 3, 8, and 11 are patentable over the cited references.

D. Petition for Extension of Time

Pursuant to 37 C.F.R. § 1.136(a), Applicant petition for an extension of time of two month up to and including December 8, 2003 in which to respond to the Office Action dated July 7, 2003. The Commissioner is authorized to deduct the process fee for this two-month

extension of time, along with any additional fees under 37 C.F.R. §§ 1.16 to 1.21 required for any reason relating to the enclosed materials, from Fulbright & Jaworski Deposit Account No.: 50-1212/FMCC:014USR1/MTG.

E. Conclusion

Applicant respectfully submits that claims 1-12 are in condition for allowance. Should Examiner Nicholson have any questions concerning this application, he is invited to contact the undersigned attorney at (512) 536-3031.

Respectfully submitted,



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